## ABSTRACT OF THE DISCLOSURE

A method for treating cancer in a human, which comprises administering to the human subject an anti-cancer effective amount of a compound selected from gossypol, gossypol acetic acid, gossypolone, metabolites thereof, or physiologically acceptable salts thereof. Also included is a method for treating cancer in a human which comprises administering to the human subject an anti-cancer effective amount of any of the compounds listed above in combination with an anti-cancer amount of other conventional chemotherapeutic effective agents. Finally, the invention also encompasses pharmaceutical composition comprising an anti-cancer effective amount of gossypol, gossypol acetic acid, or gossypolone, and anti-cancer an effective amount of conventional chemotherapeutic agent, or combinations of the latter.